



A B C D E F

Sequence Number	Primary Bit Stream (8B words)	10B Code Name	10B Code for Current RD	10B Code for Current RD+	10B Code Selection Logic
1	000 00001	/D1.0/	011101 0100	100010 1011	10B Code selected to balance the running disparity of the encoded bit stream
2	000 00101	/D5.0/	101001 1011	101001 0100	10B Code selected to balance the running disparity of the encoded bit stream
3	000 11010	/D26.0/	010110 1011	010110 0100	10B Code selected to balance the running disparity of the encoded bit stream
4	000 01111	/D15.0/	010111 0100	101000 1011	10B Code selected to balance the running disparity of the encoded bit stream

FIG. 1  
(PRIOR ART)



G

F

E

D

C

B

A

Sequence Number	Primary Bit Stream (8B words)	10B Code Name	10B Code for Current RD	10B Code for Current RD+	Additional Bit Stream	10B Code Selection Logic
1	000 00001	/D1.0/	011101 0100	100010 1011	0	10B Code selected to represent the bit of the additional bit stream
2	000 00101	/D5.0/	101001 1011	101001 0100		10B Code selected to balance the running disparity of the encoded bit stream
3	000 11010	/D26.0/	010110 1011	010110 0100	1	10B Code selected to represent the bit of the additional bit stream
4	000 01111	/D15.0/	010111 0100	101000 1011		10B Code selected to balance the running disparity of the encoded bit stream

FIG. 2

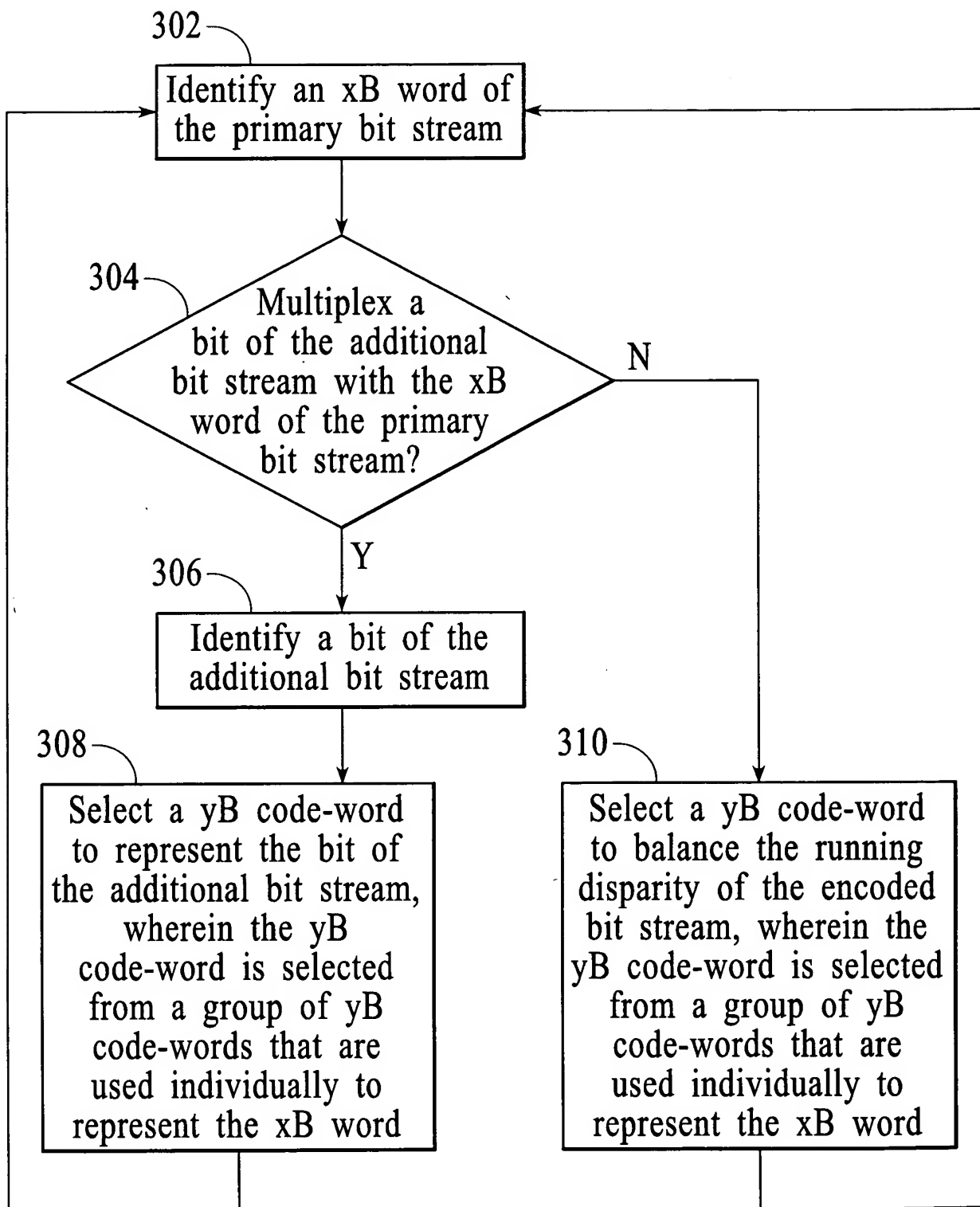


FIG. 3

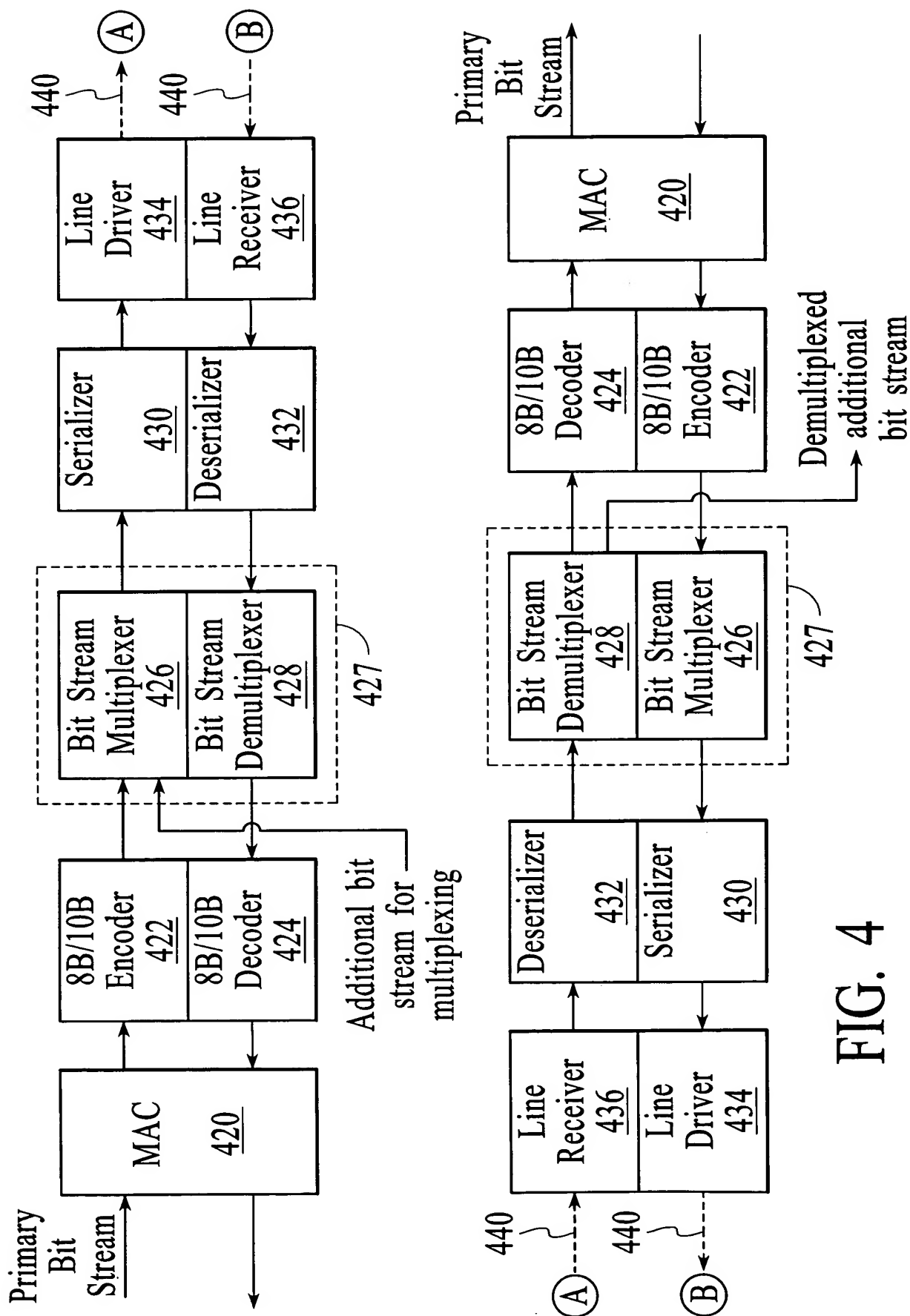
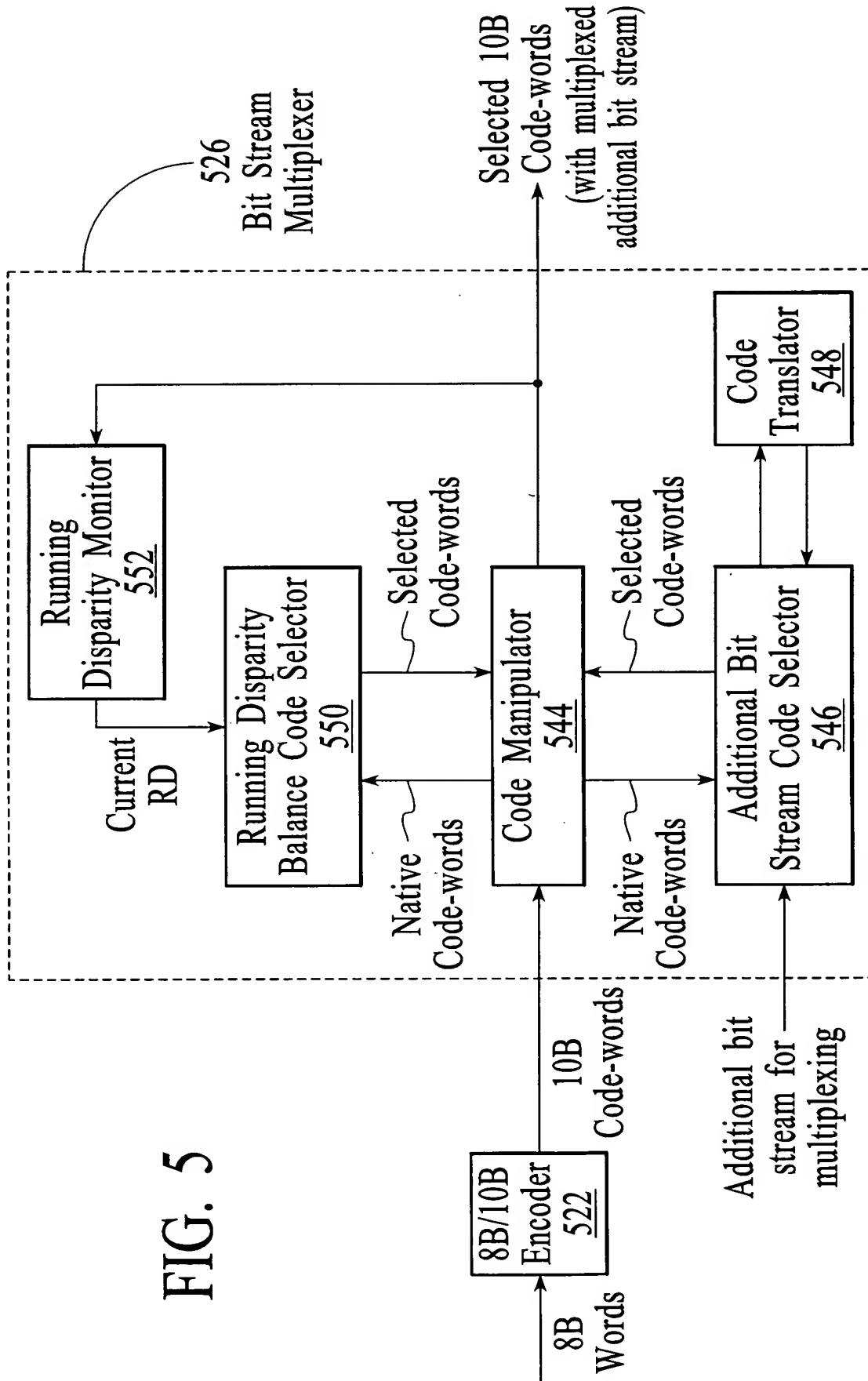


FIG. 4

FIG. 5



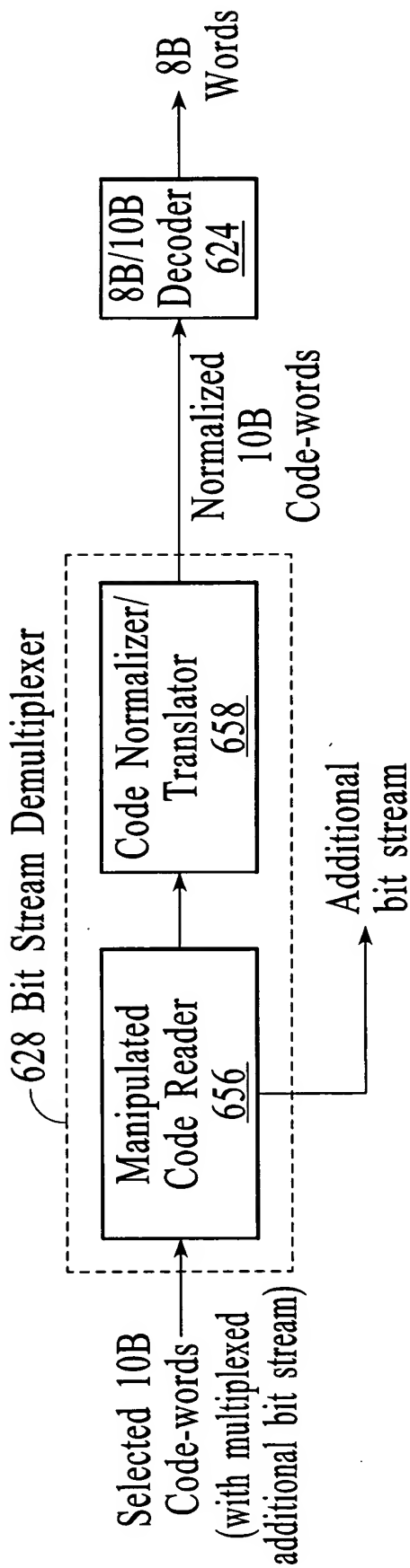


FIG. 6



A	B	C	D	$E_{(+)}$	$F_{(-)}$	G	H	I	J	K	L	M	N
	Data Bits (8B Codes)	Byte Value	10B Code Name	10B Code for Current RD+ (DC Balance + or Neutral)	10B Code for Current RD- (DC Balance - or Neutral)	New RD	RD Before Code Selection	Selected 10B Code	RD After Code Selection	Multiplexed Additional Bit Stream	RD Before Code Selection	Selected 10B Code	RD After Code Selection
1	000 00001	01	/D1.0/	011101 0100	100010 1011	S	-	+	-	0	-	-	-
2	000 00101	05	/D5.0/	101001 1011	101001 0100	F	-	+	+		-	+	+
3	000 11010	1A	/D26.0/	010110 1011	010110 0100	F	+	-	-	1	+	+	+
4	000 01111	0F	/D15.0/	010111 0100	101000 1011	S	-	+	-		+	-	+
5	100 11101	9D	/D29.4/	101110 0010	010001 1101	S	-	+	-	0	+	-	+
6	011 11111	7F	/D31.3/	101011 0011	010100 1100	F	-	+	+		+	-	-
7	101 01111	AF	/D15.5/	010111 1010	101000 1010	F	+	-	-	0	-	-	-
8	110 11000	D8	/D24.6/	110011 0110	001100 0110	F	-	+	+		-	+	+
9	001 11111	3F	/D31.1/	101011 1001	010100 1001	F	+	-	-	1	+	+	+
10	111 11110	FE	/D30.7/	011110 0001	100001 1110	S	-	+	-	0	+	-	+
11	001 00111	27	/D7.1/	111000 1001	000111 1001	S	-	+	-		+	-	+
12	001 01111	2F	/D15.1/	010111 1001	101000 1001	F	-	+	+		+	-	-
13	000 10110	16	/D22.0/	011010 1011	011010 0100	F	+	-	-	1	-	+	+

FIG. 7

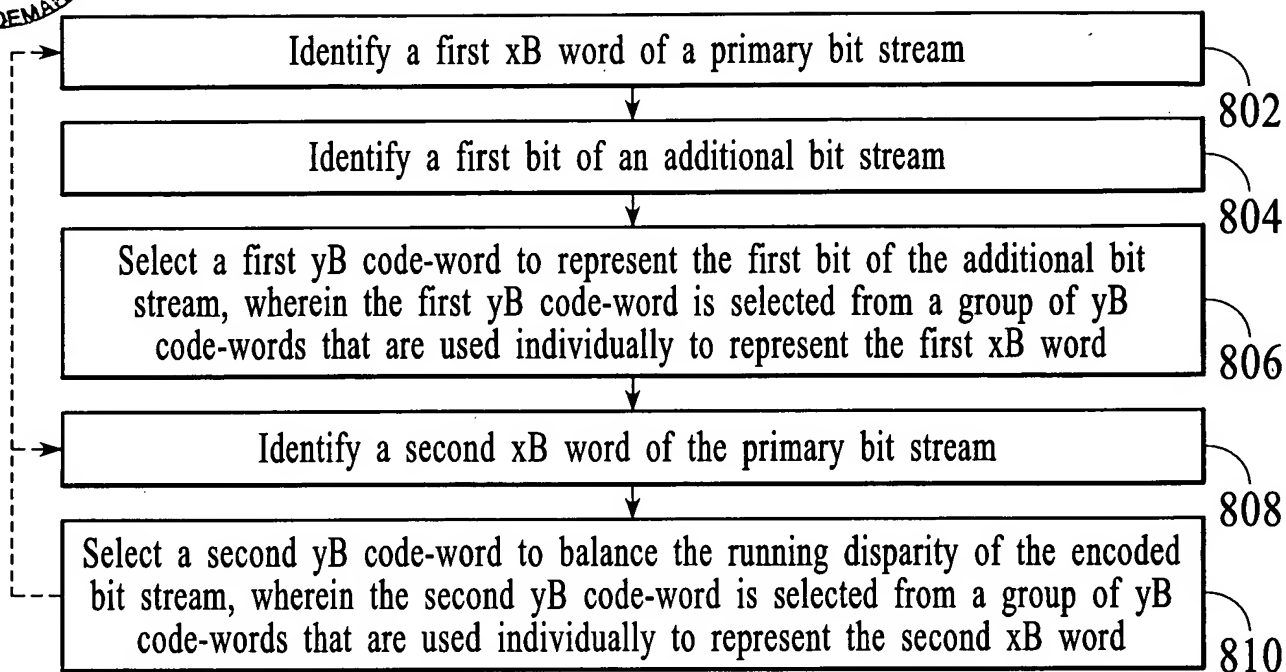


FIG. 8

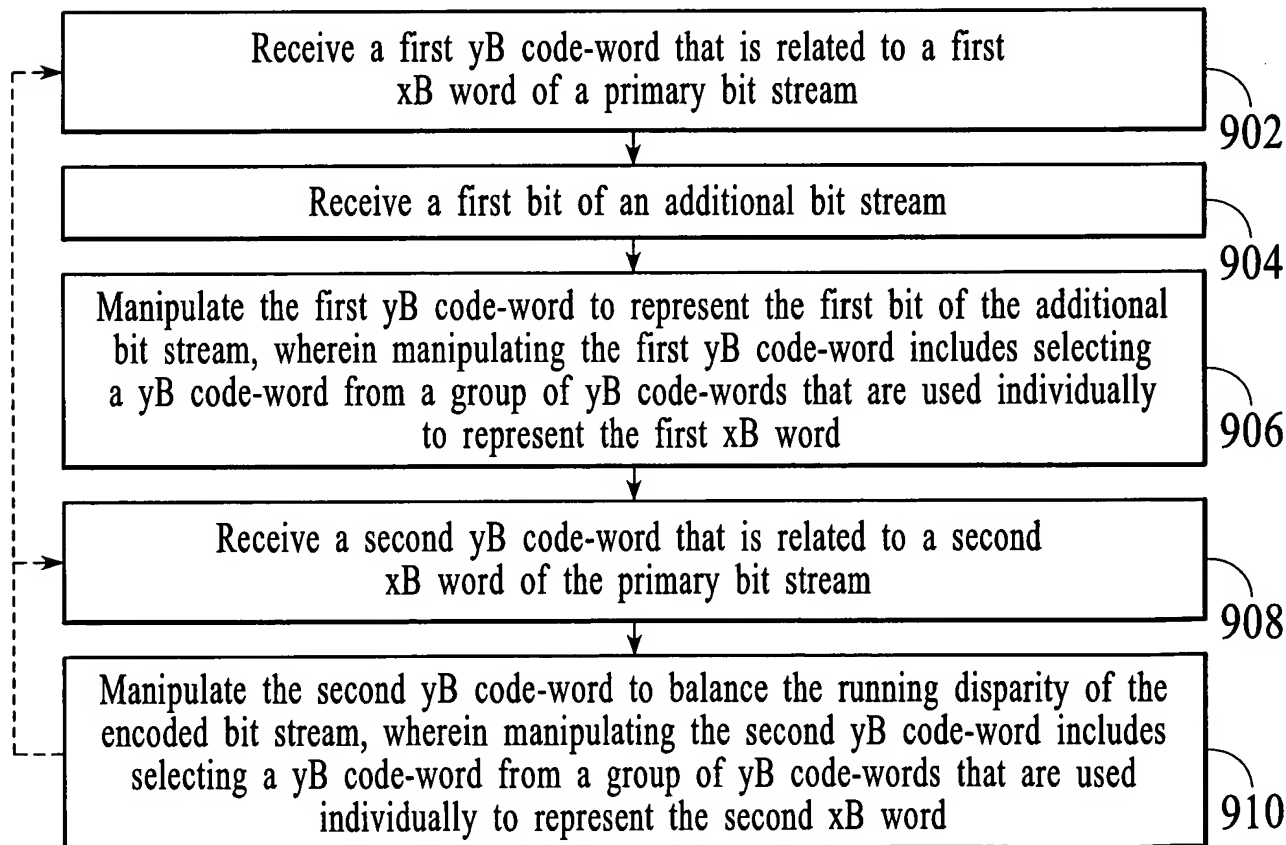


FIG. 9



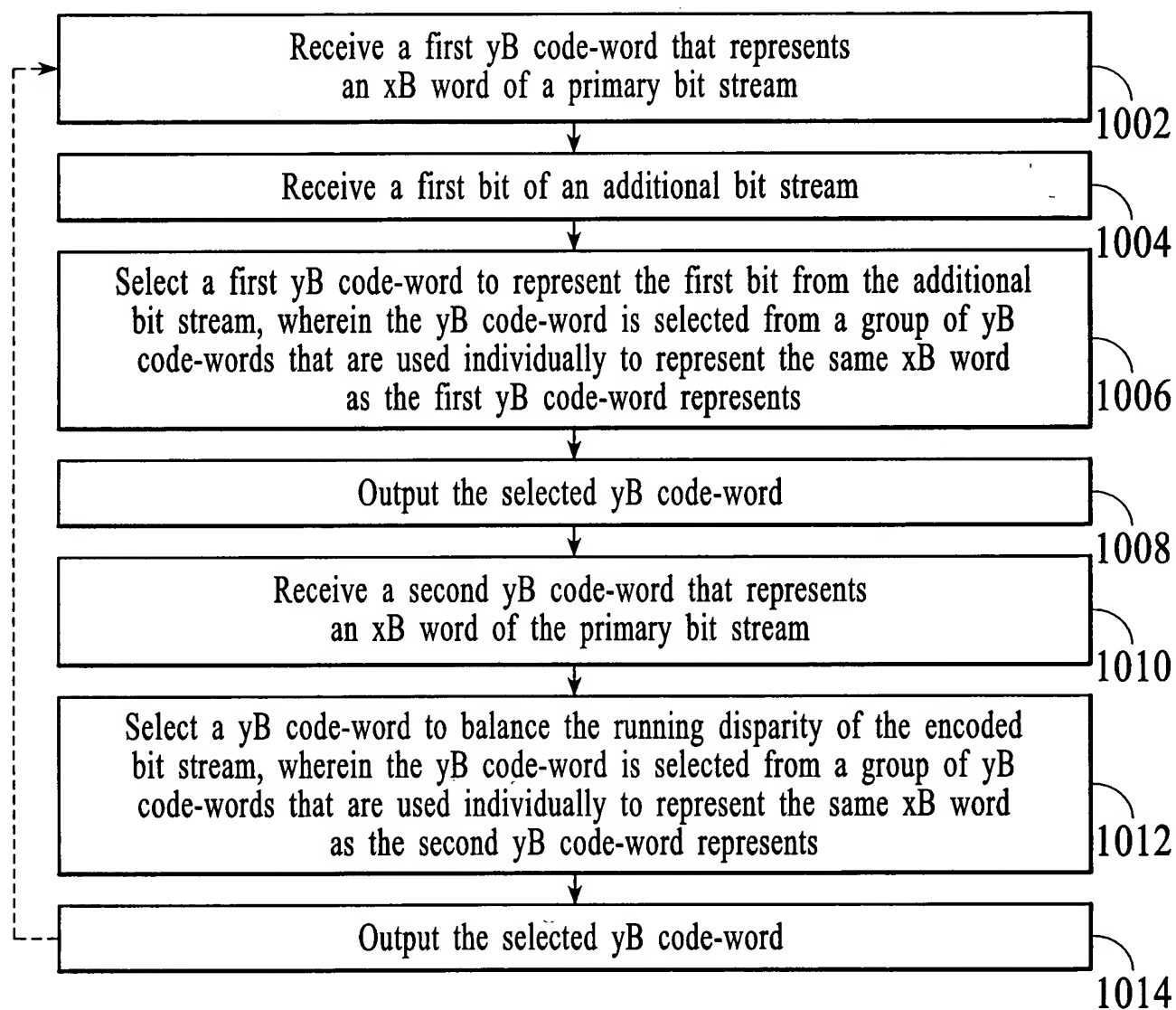
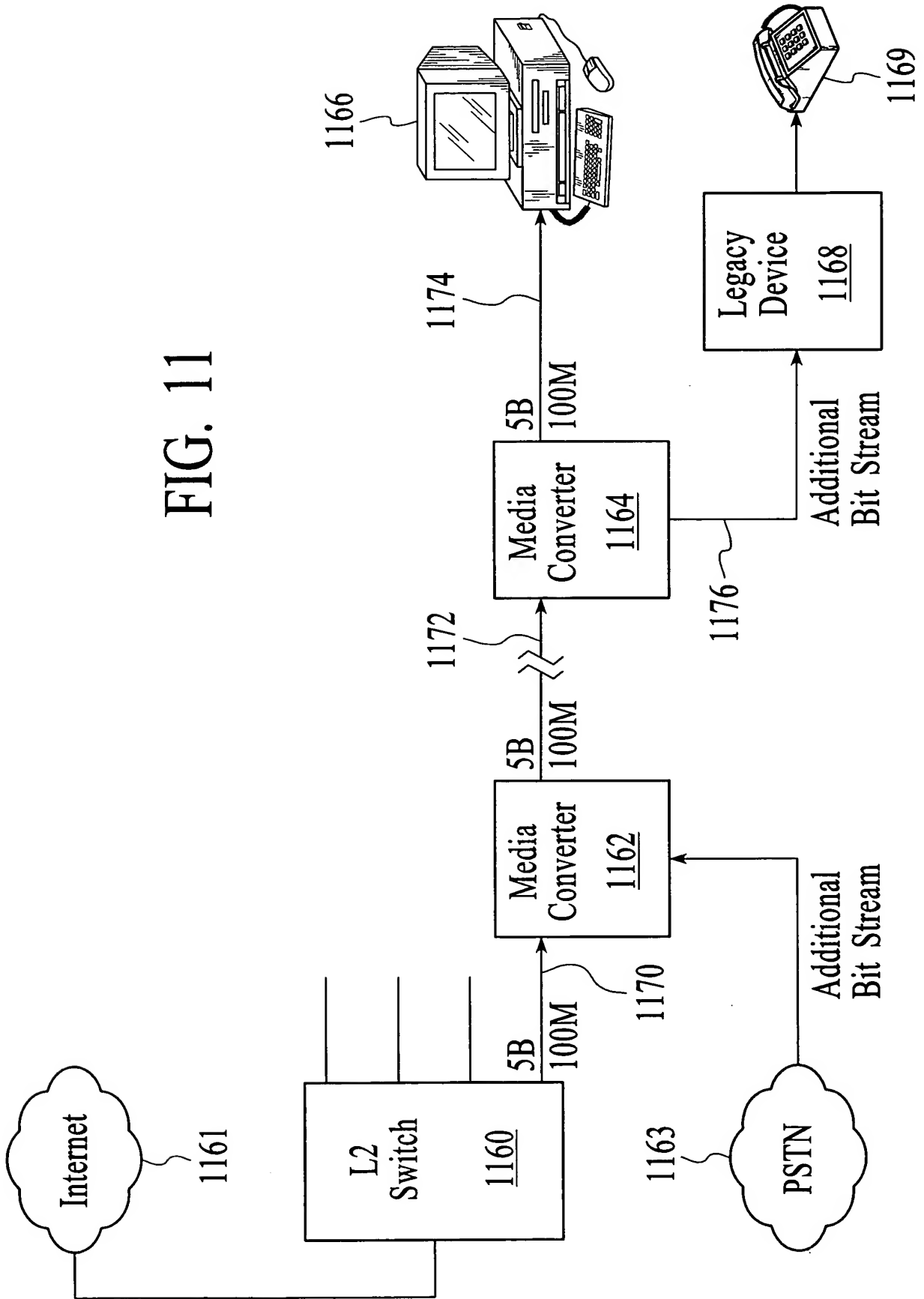


FIG. 10

FIG. 11



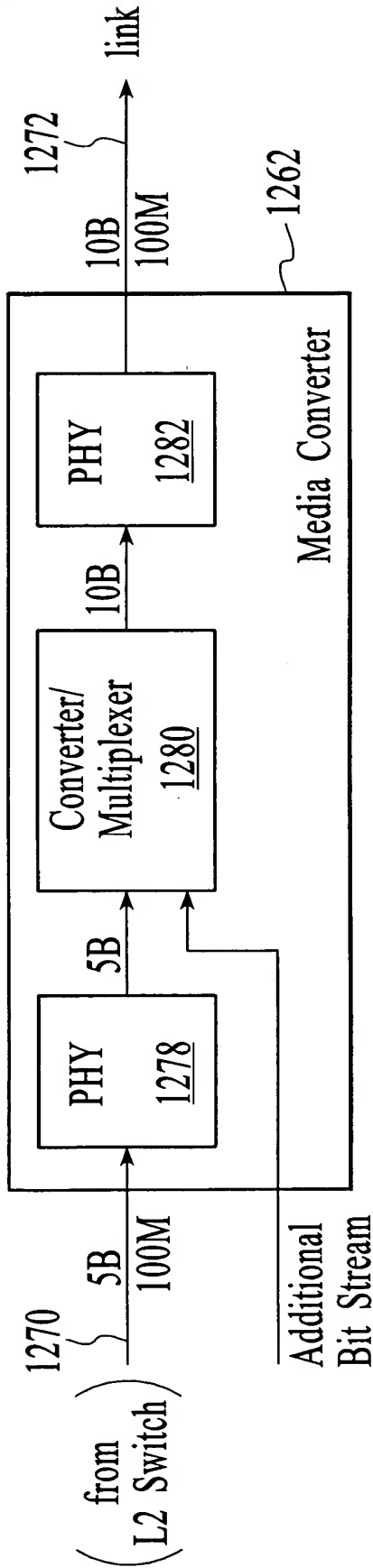


FIG. 12

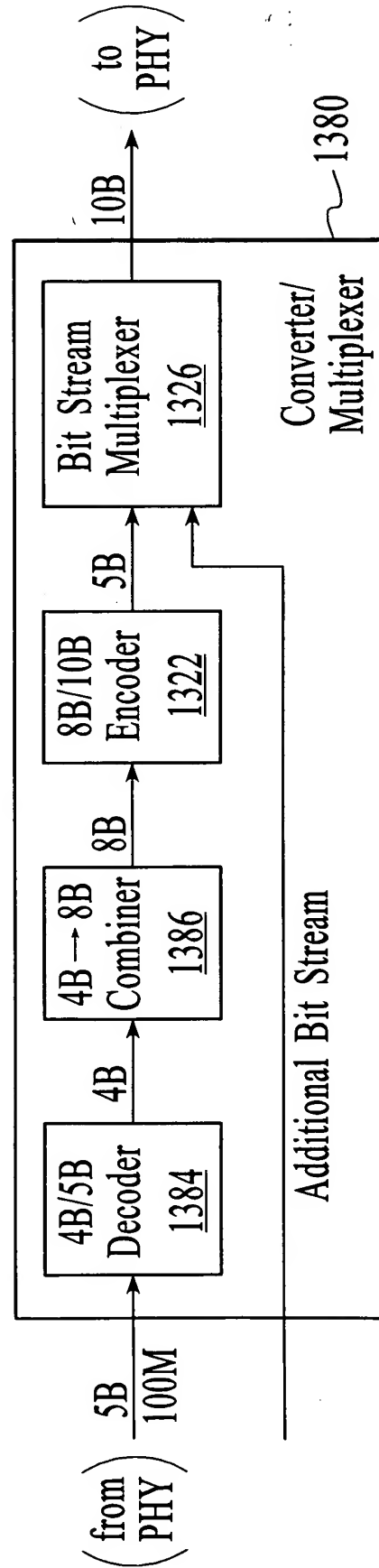
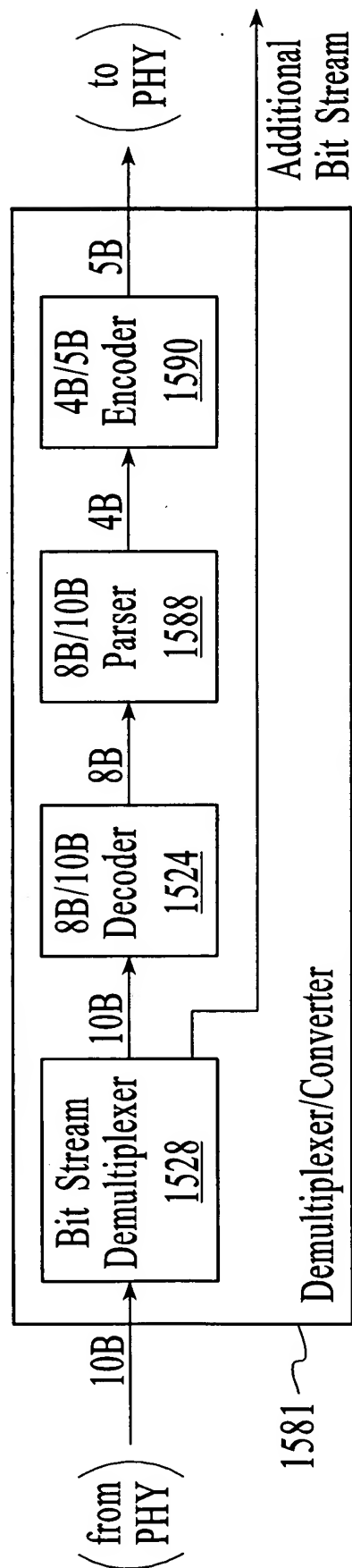
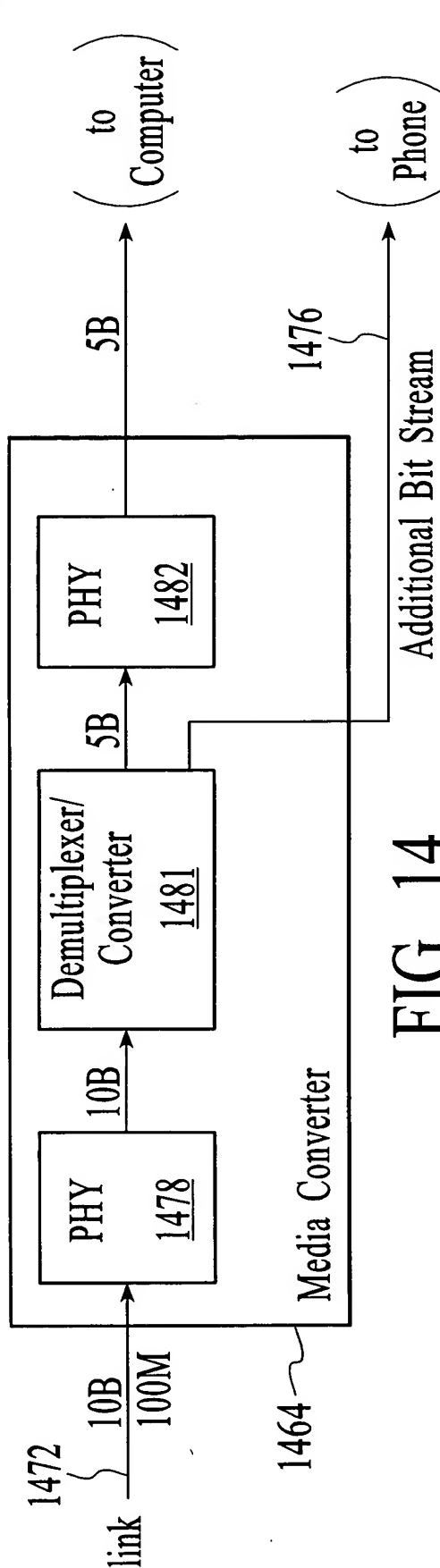


FIG. 13



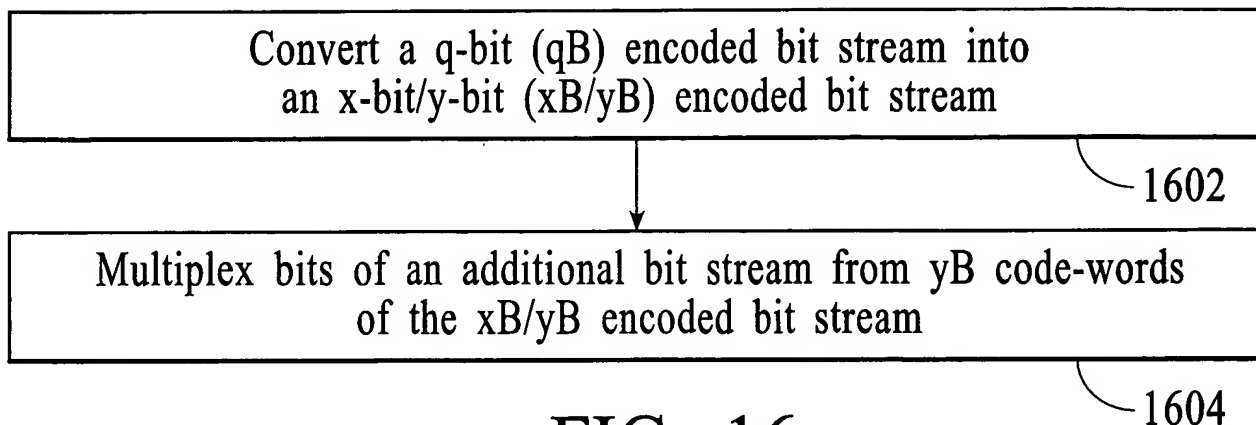


FIG. 16

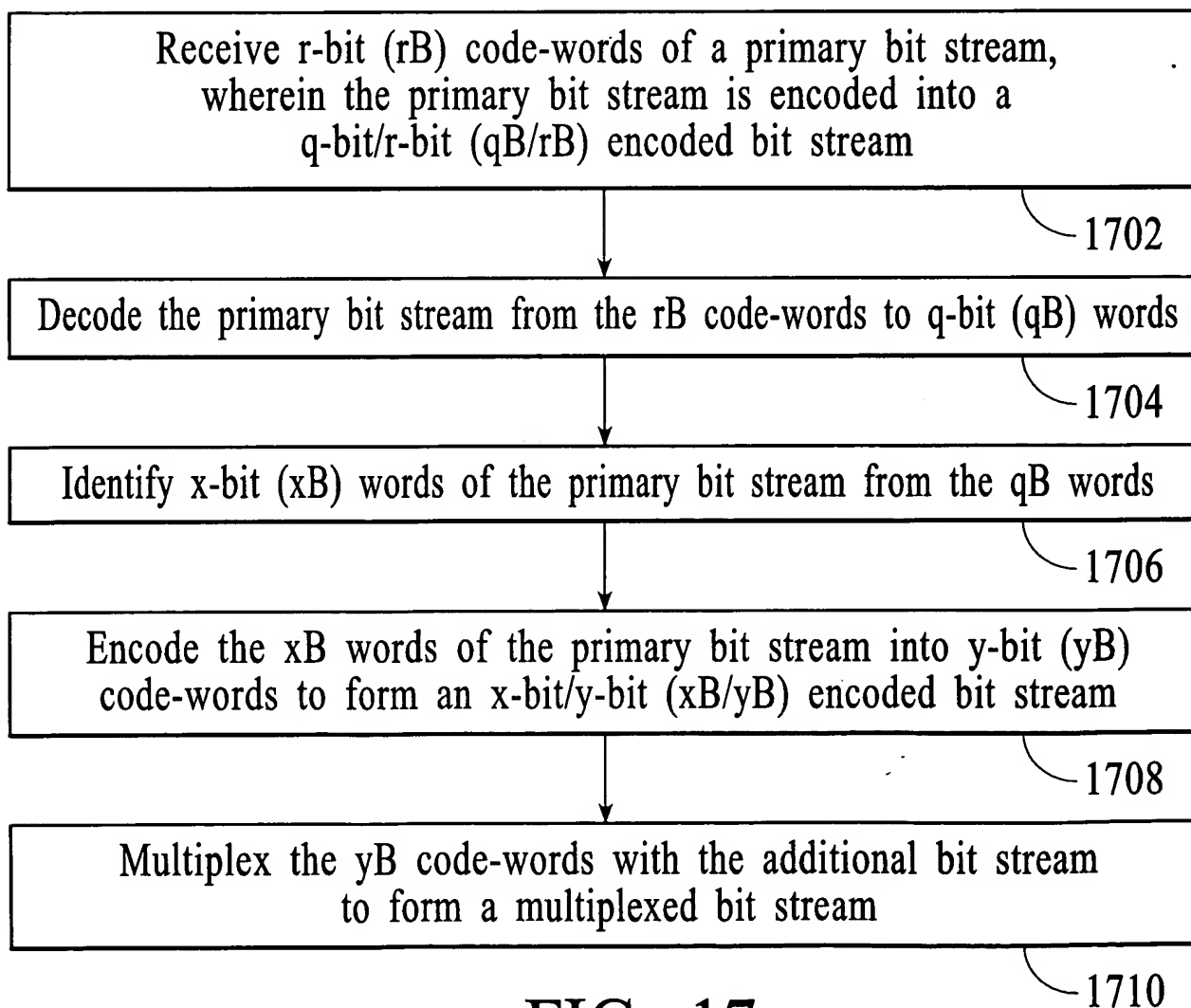


FIG. 17

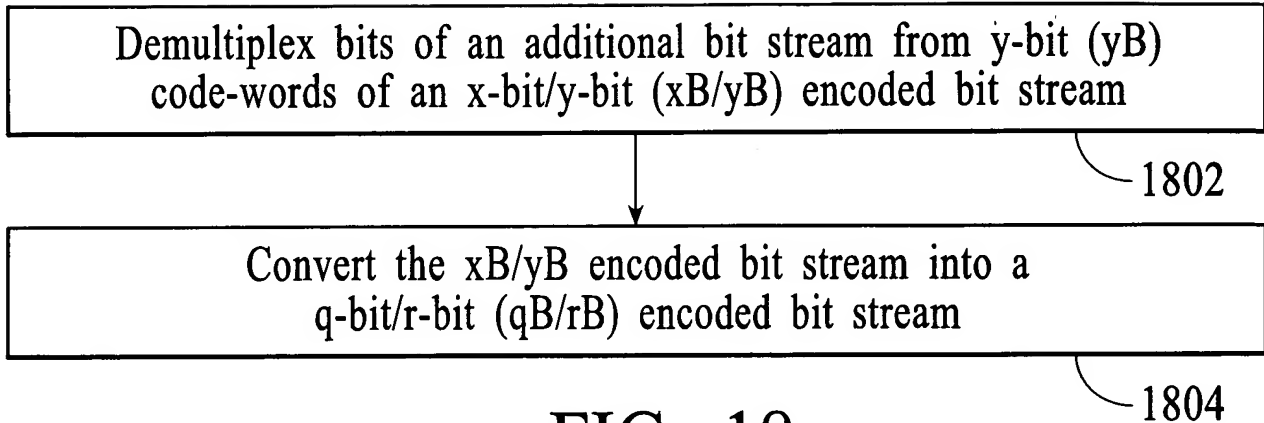


FIG. 18

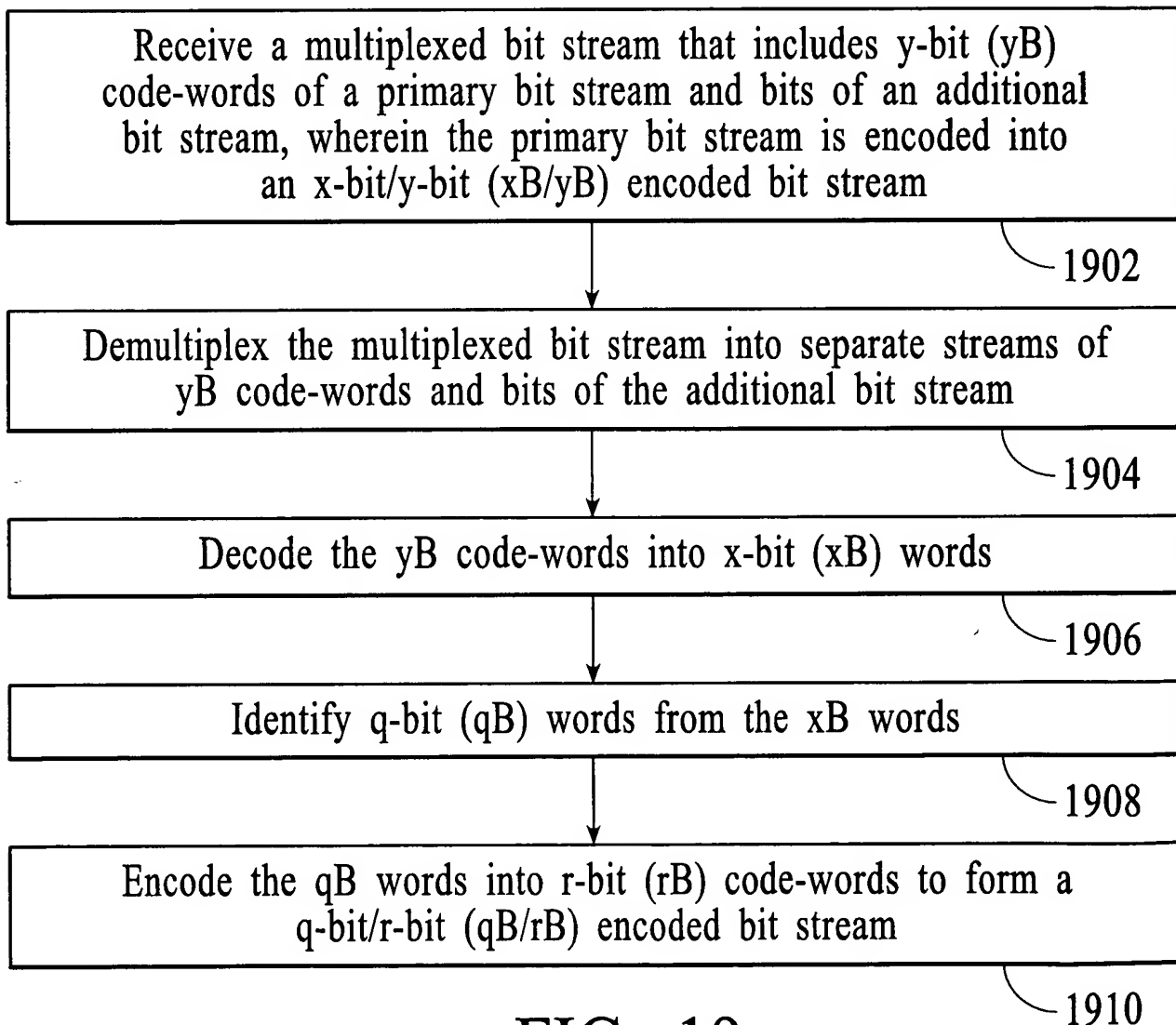


FIG. 19